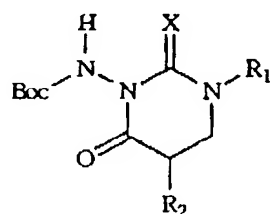


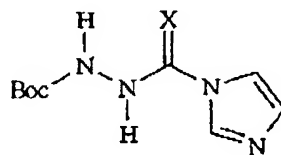
Appendix A

14. (Currently Amended) A method for making a 3-aminodihydrouracil or 3-aminodihydrothiouracil having the formula:

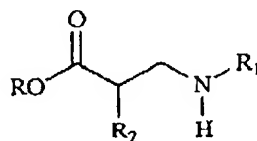


wherein X is oxygen or sulfur, R₁ is hydrogen, alkyl, a heterocyclic ring, an aromatic ring, or a heteroaromatic ring; R₂ is hydrogen, alkyl, a heterocyclic ring, an aromatic ring, or a heteroaromatic ring; or R₁ and the member carbon atom adjacent to the carbon atom containing R₂ can be taken together to form a ring system; said ring system being ~~carboxylic~~ carbocyclic ring, heterocyclic ring or heteroaromatic ring; said method comprising the steps of:

- a) reacting a hydrazine compound having the formula:



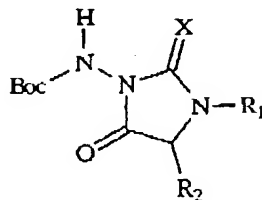
with an amino acid ester having the formula:



R is alkyl, carbocyclic ring, heterocyclic ring, aromatic ring, or heteroaromatic ring, to form a reaction mixture; and

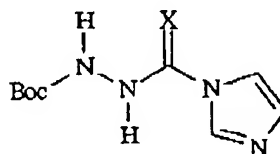
- b) heating said reaction mixture to form said 3-aminodihydrouracil or 3-aminodihydrothiouracil.

26. (Currently amended) A method for making a hydantoin or thiohydantoin having the formula:

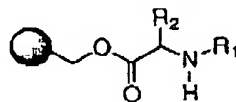


wherein X is oxygen or sulfur, R₁ is hydrogen, alkyl, a heterocyclic ring, an aromatic ring, or a heteroaromatic ring; R₂ is hydrogen, alkyl, a heterocyclic ring, an aromatic ring, or a heteroaromatic ring; or R₁ and R₂ can be taken together to form a fused carbocyclic ring, heterocyclic ring, a fused aromatic ring, or a fused heteroaromatic ring with the hydantoin or thiohydantoin ring; said method comprising the steps of:

a) reacting a hydrazine compound having the formula:



with a resin-bound amino acid ester having the formula:



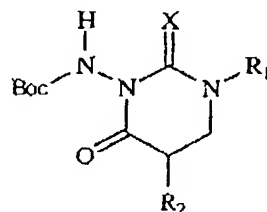
wherein the symbol:



signifies a Merrifield resin, hydroxymethyl, resin, Wang resin, or PEG resin; to form a reaction mixture; and

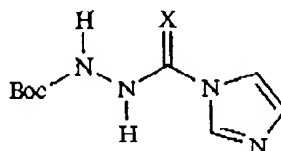
b) heating said reaction mixture to form said hydantoin or thiohydantoin.

27. (Currently Amended) A method for making a 3-aminodihydrouracil or 3-aminodihydrothiouracil having the formula:

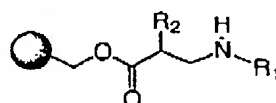


wherein X is oxygen or sulfur, R₁ is hydrogen, alkyl, a heterocyclic ring, an aromatic ring, or a heteroaromatic ring; R₂ is hydrogen, alkyl, a heterocyclic ring, an aromatic ring, or a heteroaromatic ring; or R₁ and the member carbon atom adjacent to the carbon atom containing R₂ can be taken together to form a fused carbocyclic ring, heterocyclic ring, a fused aromatic ring, or a fused heteroaromatic ring with the 3-aminodihydrouracil or 3-aminodihydrothiouracil ring; said method comprising the steps of:

- a) reacting a hydrazine compound having the formula:



with an amino acid ester having the formula:



wherein the symbol:



signifies a Merrifield resin, hydroxymethyl, resin, Wang resin, or PEG resin; to form a reaction mixture; and

- b) heating said reaction mixture to form said 3-aminodihydrouracil or 3-aminodihydrothiouracil.